



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY, FLORIDA
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

Air Master Awning, LLC
Road 2 Interior Km 56.7
P. O. Box 2097
Barceloneta, PR 00617-2097

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami-Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami-Dade County) and/or the AHJ (in areas other than Miami-Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION:

Series "SH 250 IR PW 250" Aluminum Single Hung side-by-side with Aluminum Fixed Window - L.M.I.

APPROVAL DOCUMENT: Drawing No. 12-201, "SH 250 IR Aluminum Single Hung Window with Picture Window", sheets 1 through 06 of 06, dated 07/06/12, prepared by V.J. Knezevich & Associates, LLC, with the latest revision, signed and sealed by V.J. Knezevich, P. E., bearing the Miami-Dade County Product Control Section Approval stamp with the Notice of Acceptance number and Approval date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, **Barceloneta, Puerto Rico**, series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA consists of this page 1 and evidence page E-1, as well as approval document mentioned above.

The submitted documentation was reviewed by **Jaime D. Gascon, P. E.**



Jaime D. Gascon
2/28/13

NOA No. 12-0926.06
Expiration Date: February 28, 2018
Approval Date: February 28, 2013
Page 1

Air Master Awning, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No. **12-201**, "SH 250 IR Aluminum Single Hung Window with Picture Window", sheets 1 through 06 of 06, dated 07/06/12, prepared by V.J. Knezevich & Associates, LLC, with the latest revision, signed and sealed by V.J. Knezevich, P. E.

B. TESTS

1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Large Missile Impact Test per FBC, TAS 201-94
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of Aluminum Single Hung with Fixed Window, prepared by Blackwater Testing, Inc., Test Report No. **BT-AM-12-002**, dated 09/11/12, signed and sealed by Yami Gerardo Kuri, P.E.

C. CALCULATIONS

1. Anchor calculations and structural analysis, complying with **FBC-2010** and ANSI/ AAMA/ NWWDA 1001/ I.S.2-97, prepared by V.J. Knezevich & Associates, LLC, dated 02/18/13, signed and sealed by V.J. Knezevich, P. E.
2. **Glazing complies with ASTM E1300-04e1**

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER).

E. MATERIAL CERTIFICATIONS

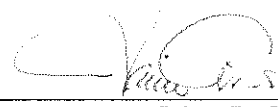
1. Notice of Acceptance No. **11-1102.09** issued to **Solutia, Inc.** for their "**Saflex CP -Saflex and Saflex HP Composites Glass Interlayers with PET Core**" dated 06/14/12, expiring on 12/11/13.

F. STATEMENTS

1. Statement letter of no financial interest, independence, conformance and compliance with the **FBC-2010** and ANSI/ AAMA/ NWWDA 1001/ I.S.2-97, prepared by V.J. Knezevich & Associates, LLC, dated 02/18/13, signed and sealed by V.J. Knezevich, P. E.
2. Laboratory addendum letter for Test Report No. **BT-AM-12-002**, issued by Blackwater Testing, Inc., dated 09/18/12, signed and sealed by Yami Gerardo Kuri, P. E.
3. Laboratory compliance letter for Test Report No. **BT-AM-12-002**, issued by Blackwater Testing, Inc., dated 09/11/12, signed and sealed by Yami Gerardo Kuri, P. E.

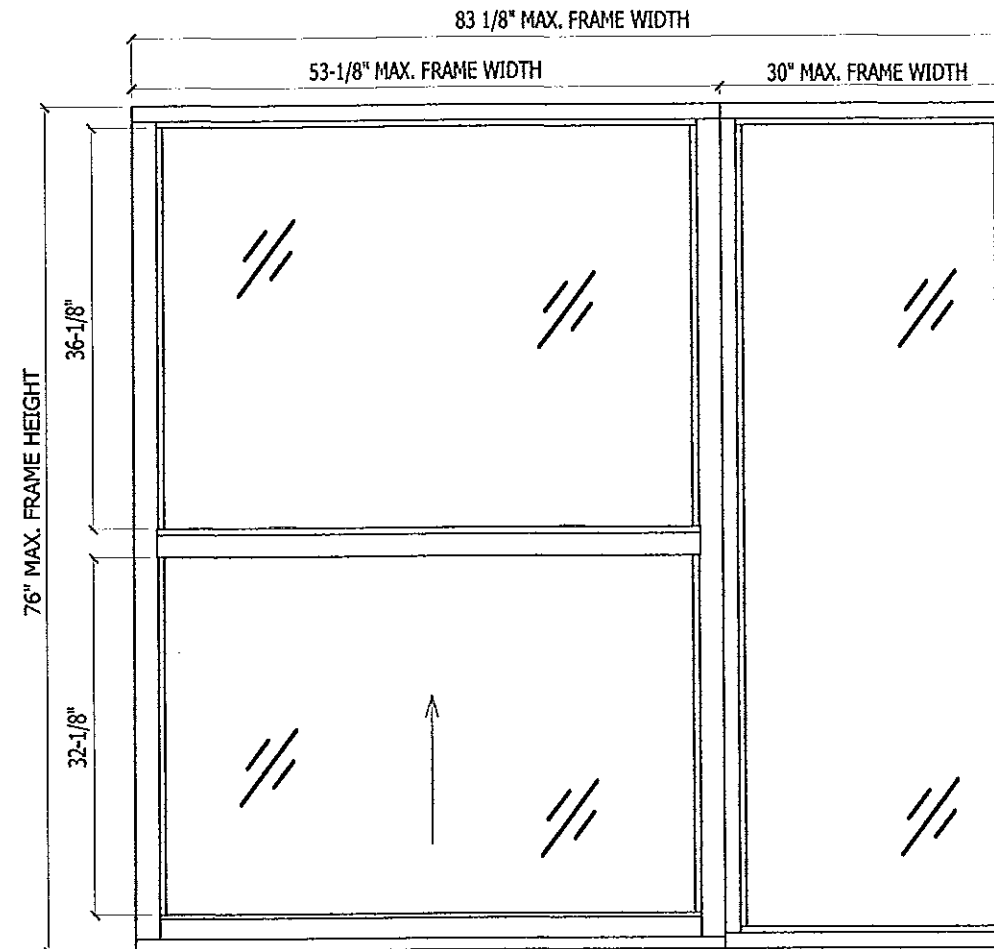
G. OTHERS

1. None.

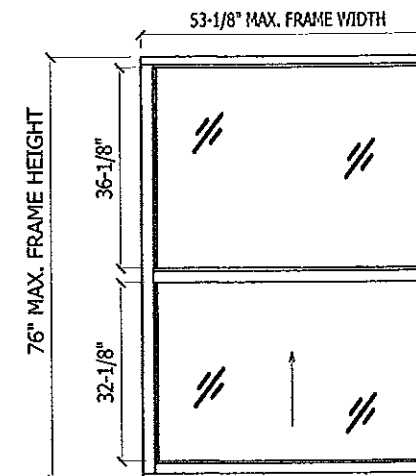


Jaime D. Gascon, P. E.
Product Control Section Supervisor
NOA No. 12-0926.06
Expiration Date: February 28, 2018
Approval Date: February 28, 2013

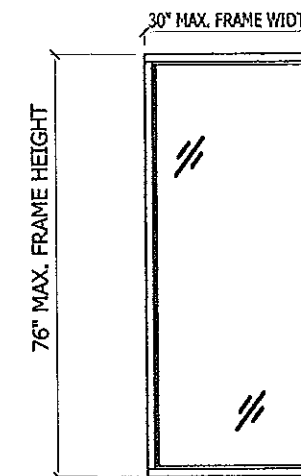
BILL OF MATERIAL			
ITEM #	PART #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS & EXTRUSIONS			
1	22018	FRAME HEAD W/FLANGE	GLOBAL HOLDEX / 6063-T5
1A	22017	FRAME HEAD	GLOBAL HOLDEX / 6063-T5
2	22022	FRAME JAMB W/FLANGE	GLOBAL HOLDEX / 6063-T5
2A	22021	FRAME JAMB	GLOBAL HOLDEX / 6063-T5
3	22701	FRAME SILL W/FLANGE	GLOBAL HOLDEX / 6063-T5
3A	22713	FRAME SILL	GLOBAL HOLDEX / 6063-T5
4	22019	FIXED MEETING	GLOBAL HOLDEX / 6063-T5
5	22023	VENT. TOP	GLOBAL HOLDEX / 6063-T5
6	22024	VENT BOTTOM	GLOBAL HOLDEX / 6063-T5
7	22025	VENT JAMB	GLOBAL HOLDEX / 6063-T5
8	22250	GLASS STOP	GLOBAL HOLDEX / 6063-T5
9	22029	MULLION ZERO	GLOBAL HOLDEX / 6063-T6 PERFILES DE ALUMINIO / 6063-T6
10	22012	VENT STOP SH 250	WILLIAM BONNELL / 6063-T5 PERFILES DE ALUMINIO / 6063-T5
11	22028	ANCHOR CLIP	GLOBAL HOLDEX / 6063-T5 PERFILES DE ALUMINIO / 6063-T5
11A	96520	ANGLE 1.122" x 1.25" x 0.1" x1.6"	GLOBAL HOLDEX / 6063-T5
GLASS			
12	75192	IMPACT GLASS 5/16" CLEAR	AGC FLAT GLASS NORTH AMERICA
		1/8" ANN - 0.090" SAFLEX CP - SAFLEX AND SAFLEX HP COMPOSITE GLASS INTERLAYERS WITH PET CORE BY Solutia, INC. - 1/8" ANN	
SEALS & SEALANTS			
13	22438	WEATHERSTRIP SILL	ULTRAFAB
14	96917	VINYL BOTTOM RAIL	SOUTHERN PLASTICS
15	96936	VINYL FP-448 BLACK	SOUTHERN PLASTICS
16	53580	DC-995 SILCON STRUCTURAL BLACK	CARIBBEAN SALES AGENCY
17	96817	FELPA #1220 VENT JAMB	ULTRAFAB
18	95000	BUTYL GASKET JAMB-HEAD	LAMATEK, INC
19	95001	BUTYL GASKET JAMB-SILL	LAMATEK, INC
20	95002	BUTYL GASKET FIX MEETING	LAMATEK, INC
20A	76648	NOVAFLEX M-170	NOVAGARD SILICONES
20B	96707	TAPE 1/4" x 36 YD VHB 4991B	3M
20C		LIQUID NAIL LN 740 OR LN 700	LIQUID NAIL ADHESIVE MANUFACTURE
FASTENERS			
21	95499	SCR 8x3/4" PHI P/H SS T-A	LA CASA DE LOS TORNILLOS SONFAST / CENTURY FASTENERS
22	60707	NUTS BLIND 10-24	REMACHES DE PUERTO RICO
23	95694	10-24x1-1/2" PHI F/H S/S	LA CASA DE LOS TORNILLOS SONFAST
24	EAJ185	#12-14 x 1" 300 S.S. BI-METAL S.D. PT. 2 HWH	ELCO CONSTRUCTION PRODUCTS-BI-FLEX
25	ELG OR ELD	1/4"Ø ELCO ULTRACON PHI F/H P/H	ELCO CONSTRUCTION PRODUCTS WITH STALGARD
25A	N/A	#10 WOOD SCREW PHI F/H S.S.	W/ DISSIMILAR METALS CORROSION COATING
HARDWARE			
26	10698	SASH LOCK	SULLIVAN & ASSOCIATES
27	10514	SASH BALANCE SPRING & PULLEY	AMESBURY
28	10696	CAM SASH BUSHING	MASTER TOOL CO.



TYPICAL EXTERIOR ELEVATION FOR SH250
SINGLE HUNG WINDOW, IR
WITH PICTURE WINDOW, IR - AS TESTED
SCALE : N.T.S.



TYPICAL EXTERIOR ELEVATION
SINGLE HUNG WINDOW
SCALE : N.T.S.



TYPICAL EXTERIOR ELEVATION
PICTURE WINDOW
SCALE : N.T.S.

Approved as complying with the
Florida Building Code
Date 02/28/2013
NOA# 12-0926.06
Miami Dade Product Control
By [Signature]

KNEZEVICH ASSOCIATES
Consulting Engineers * COA, 27989
2590 S.W. 105th Terrace * Davie, Florida 33324
T (954) 821-6933 * VJ@Knezevich-Associates.com
www.Knezevich-Associates.com
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SH250 ALUMINUM SINGLE HUNG WINDOW IR WITH PICTURE WINDOW IR

AIR MASTER AWNING, LLC.
WINDOWS AND DOORS
ROAD PR #2 INTERIOR KM 56.7
BARCELONETA, P.R. 00617
Tel: (787) 623-1800 Fax: (787) 623-0087

revisions	description	no	date	by

V.J. Knezevich
Professional Engineer
License No. PE 0010561

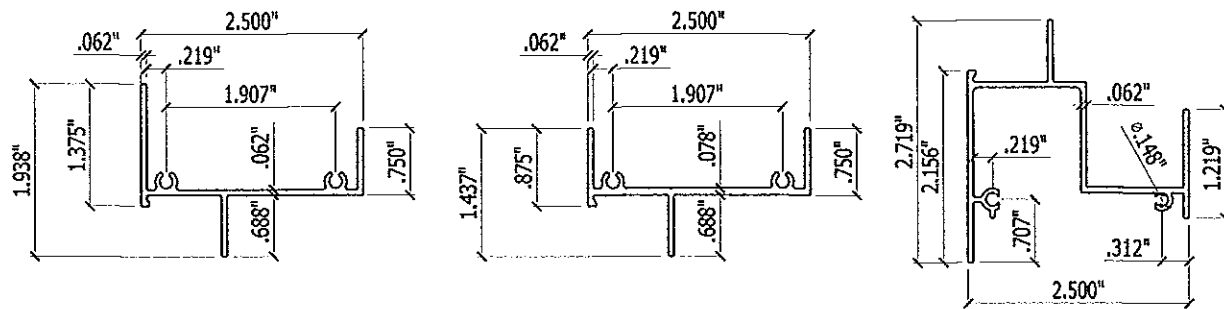
JUL 06 2012

drawn by ARV scale AS NOTED

date 07/06/2012

drawing no. **12-201**

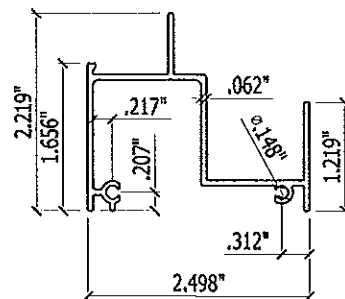
sheet 1 of 6



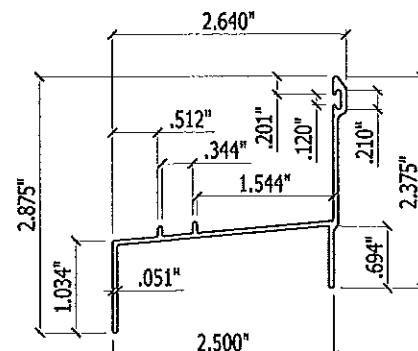
1 FRAME HEAD W/FLANGE
SCALE: HALF SIZE

1A FRAME HEAD
SCALE: HALF SIZE

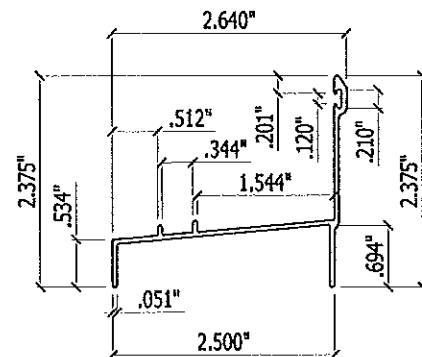
2 FRAME JAMB W/FLANGE
SCALE: HALF SIZE



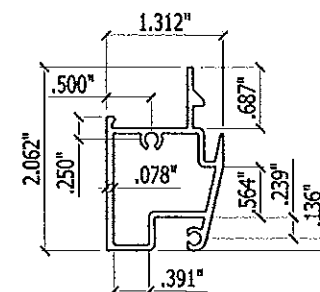
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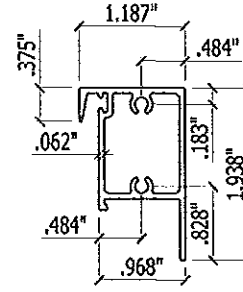
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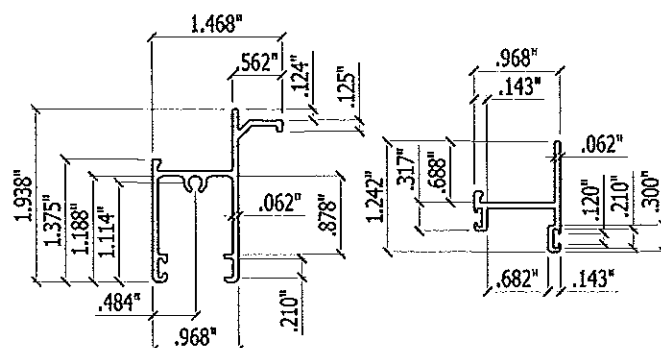
3A FRAME SILL
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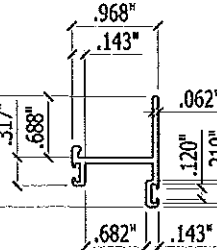
4 FIXED MEET RAIL
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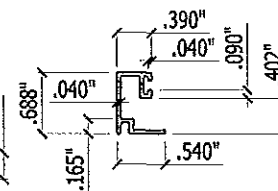
5 VENT TOP
SCALE: HALF SIZE



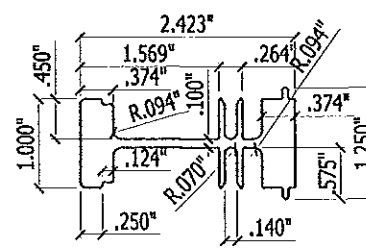
6 VENT BOTTOM
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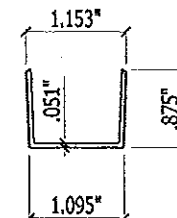
7 VENT JAMB
SCALE: HALF SIZE



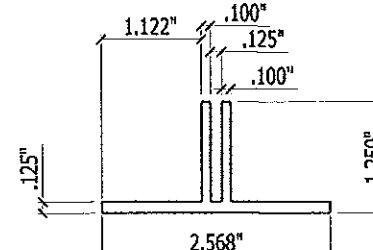
8 GLASS STOP
SCALE: HALF SIZE



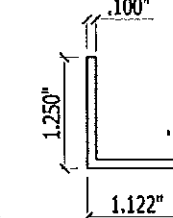
9 MULLION ZERO
SCALE: HALF SIZE
MATERIAL: 6063-T6



10 VENT STOP
SCALE: HALF SIZE



11 ANCHOR CLIP 1.6\"/>



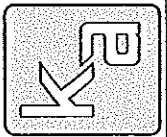
11A CLIP ANGLE 1.6\"/>

GENERAL NOTES:

- THIS WINDOW SYSTEM HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (FBC) 2010, INCLUDING THE HVHZ, UNDER THE SPECIFIC CONDITIONS SHOWN ON THIS DRAWING. THIS WINDOW SYSTEM HAS COMPLIED WITH FBC 2411.3.2.1/AAMA 101/1.S.2-97 (ASTM E283, ASTM E331, ASTM F588) AND TAS 201, TAS 202 & TAS 203. THE SH & PICTURE WINDOWS SYSTEM MULLED TOGETHER, AS WELL AS THE SH WINDOW & PICTURE WINDOW, EACH INSTALLED INDEPENDENTLY ARE LARGE MISSILE IMPACT RESISTANT.
- 2 x WOOD BUCKS SHALL BE INSTALLED, BY OTHERS, AND ANCHORED SO THAT THE BUILDING RESISTS THE SUPERIMPOSED LOADS ON THE WINDOW, IN ACCORDANCE WITH REQUIREMENTS OF FBC.
- ANCHOR CONDITIONS NOT DESCRIBED IN THIS DRAWING ARE TO BE ENGINEERED ON A SITE SPECIFIC BASIS.
- DETERMINE THE POSITIVE AND NEGATIVE DESIGN LOADS TO USE WHEN REFERENCING THESE DOCUMENTS IN ACCORDANCE WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY. FOR WIND LOAD CALCULATIONS IN ACCORDANCE WITH ASCE 7-10, A DIRECTIONALITY FACTOR OF $K_d = 0.85$ MAY BE USED.
- NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS PRODUCT. A WIND LOAD DURATION FACTOR OF 1.6 WAS USED FOR WOOD SCREW ANALYSIS, IN THE PREPARATION OF THESE DOCUMENTS.
- THESE PRODUCT EVALUATION DOCUMENTS ARE PREPARED BY THE PRODUCT ENGINEER AND ARE GENERIC. THEY DO NOT INCLUDE INFORMATION PREPARED FOR A SPECIFIC SITE.
- THESE PRODUCT EVALUATION DOCUMENTS ARE SUITABLE TO BE APPLIED BY THE CONTRACTOR PROVIDED THE CONTRACTOR DOES NOT DEVIATE FROM THE CONDITIONS DETAILED HEREIN AND THE CONTRACTOR VERIFIES THE EXISTING STRUCTURE IS CAPABLE OF SUPPORTING THE LOADS.
- WHEN THE SITE CONDITIONS DEVIATE FROM THESE PRODUCT EVALUATION DOCUMENTS, SITE SPECIFIC DOCUMENTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT. IF THE DEVIATING SITE SPECIFIC DOCUMENTS ARE PREPARED BY A DELEGATED FLORIDA REGISTERED ENGINEER OR ARCHITECT, SAID DOCUMENTS SHALL BE SUBMITTED TO THE PRODUCT ENGINEER FOR REVIEW.
- WHERE THE CONTRACTOR OR THE BUILDING OFFICIAL REQUIRES DOCUMENTS FOR A SITE SPECIFIC APPLICATION, THESE DOCUMENTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT FOR SAID APPLICATION.
- ALTERATIONS OR ADDITIONS TO THIS DOCUMENT ARE NOT PERMITTED.
- GLAZING MATERIALS:
THE GLASS CONSISTED OF 5/16" THICK (NOMINAL) LAMINATED GLASS COMPRISED OF THE FOLLOWING COMPONENTS:
A. 1/8" ANNEALED GLASS
B. 0.090" SAFLEX CP-SAFLEX AND SAFLEX HP COMPOSITE GLASS INTERLAYERS WITH PET CORE BY SOLUTIA, INC. AS TESTED AND PER MIAMI-DADE PRODUCT APPROVAL (NOA).
C. 1/8" ANNEALED GLASS
- SEE WINDOW SIZE VS DESIGN LOADS & ANCHOR SCHEDULES ON PAGE 5 OF 6.
A. POSITIVE LOAD IS 73.7 PSF FOR ALL SIZES AND IS BASED ON WATER TEST PRESSURE AND LAMINATED GLASS CHART FIG.A1.29 IN ASTM E1300-04e1.
B. NEGATIVE LOAD IS 73.7 PSF FOR ALL SIZES AND COMPLIES WITH LAMINATED GLASS CHART FIG.A1.29 IN ASTM E1300-04e1.
- THIS PRODUCT HAS BEEN SUCCESSFULLY TESTED BY BLACKWATER TESTING FOR FLORIDA BUILDING CODE COMPLIANCE.
A. BLACKWATER TESTING INC. REPORT NO. BT-AM-12-002
- ADDITIONAL PROTECTION FROM WINDBORNE DEBRIS (SHUTTERS) IS NOT REQUIRED ON OPENINGS WHERE THESE PRODUCT ARE USED. COMPONENTS ① THROUGH ⑫ ARE 6063-T5 EXTRUDED ALUMINUM ALLOY UNLESS OTHERWISE NOTED.
- ALL WOOD IN CONTACT WITH CONCRETE SHALL BE P.T. & COMPATIBLE WITH ALUMINUM ALLOY SPECIFIED.
- MATERIALS, INCLUDING, BUT NOT LIMITED TO FASTENERS OR SCREWS THAT COME IN CONTACT WITH DISSIMILAR METALS SHALL MEET THE REQUIREMENTS OF FBC CHAPTER 20. ALSO FASTENERS & SCREWS MUST BE COMPATIBLE WITH CHEMICALS USED FOR PRESSURE TREATMENT OF WOOD.
- PLYWOOD SHIM SHALL BE MINIMUM STRUCTURAL I, CD EXPOSURE 1, PRESSURE TREATED (PT) DURABLE WOOD (DW), WOOD PRESERVATIVE (WP) OR PRODUCT APPROVED STRUCTURAL PANEL, GROUP 1, GRADE STRESS LEVEL S-1, WITH A MINIMUM WOOD SPECIFIC GRAVITY OF $SG=0.42$, MAXIMUM BUTT-JOINT SPACING OF 30T, NOT TO EXCEED 21 1/2 INCHES, ON CENTER, PER NDS 2005, INCLUDING AF & PA/AWC YS10 STANDARD AND PER FBC 2010.
- THE ADHESIVE MUST MEET OR EXCEED APA-AFG-01; ASTM D-3498; AND ASTM C-557 PER MANUFACTURER'S SPECIFICATIONS.
- THE ADHESIVE SHALL BE LIQUID NAILS ADHESIVE LN740.

Approved as complying with the
Florida Building Code
Date: 02/28/2013
NOA# 12-0926-06
Miami Dade Product Control

By: [Signature]

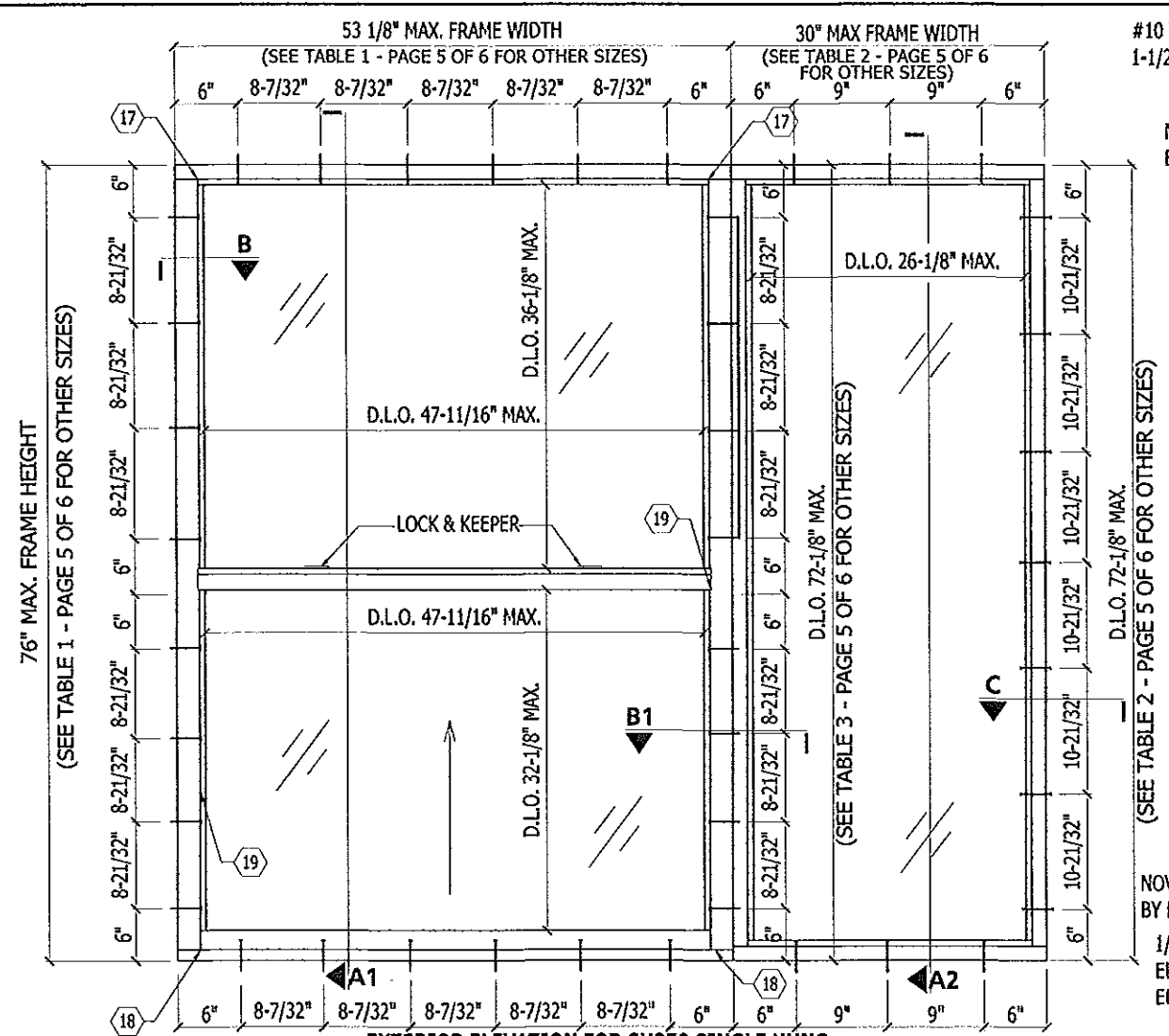


KNEZEVICH ASSOCIATES
Consulting Engineers • COA 27989
2590 S.W. 105th Terrace • Davie, Florida 33324
T (954) 821-6933 • VJ@Knezevich-Associates.com
www.Knezevich-Associates.com
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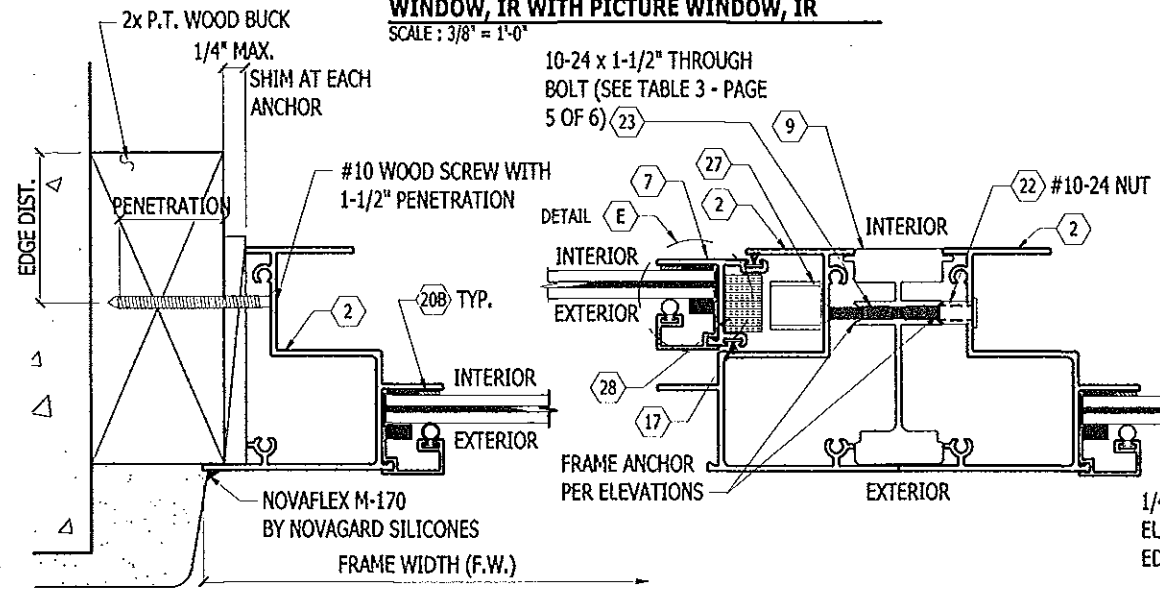
SH250 ALUMINUM SINGLE HUNG
WINDOW IR WITH PICTURE WINDOW IR
AIR MASTER AWNING, LLC.
WINDOWS AND DOORS
ROAD PR #2 INTERIOR KM 56.7
BARCELONETA, P.R. 00617
Tel: (787) 620-1800 Fax: (787) 622-0087

revisions		description	
no	date	by	description

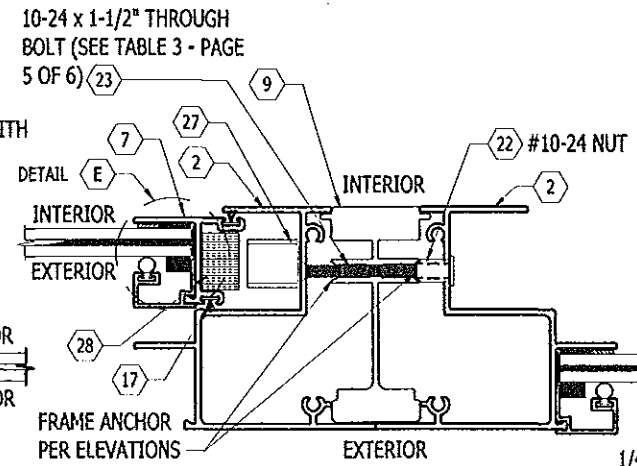
V.J. Knezevich
Professional Engineer
FL license No.: 120010938
JUL 06 2012
drawn by: ARV scale: AS NOTED
date: 07/06/2012
drawing no: 12-201
sheet 2 of 6



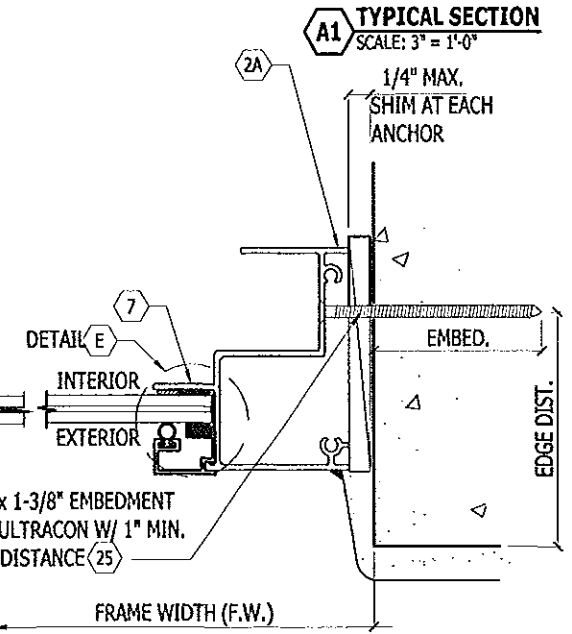
EXTERIOR ELEVATION FOR SH250 SINGLE HUNG WINDOW, IR WITH PICTURE WINDOW, IR
SCALE: 3/8" = 1'-0"



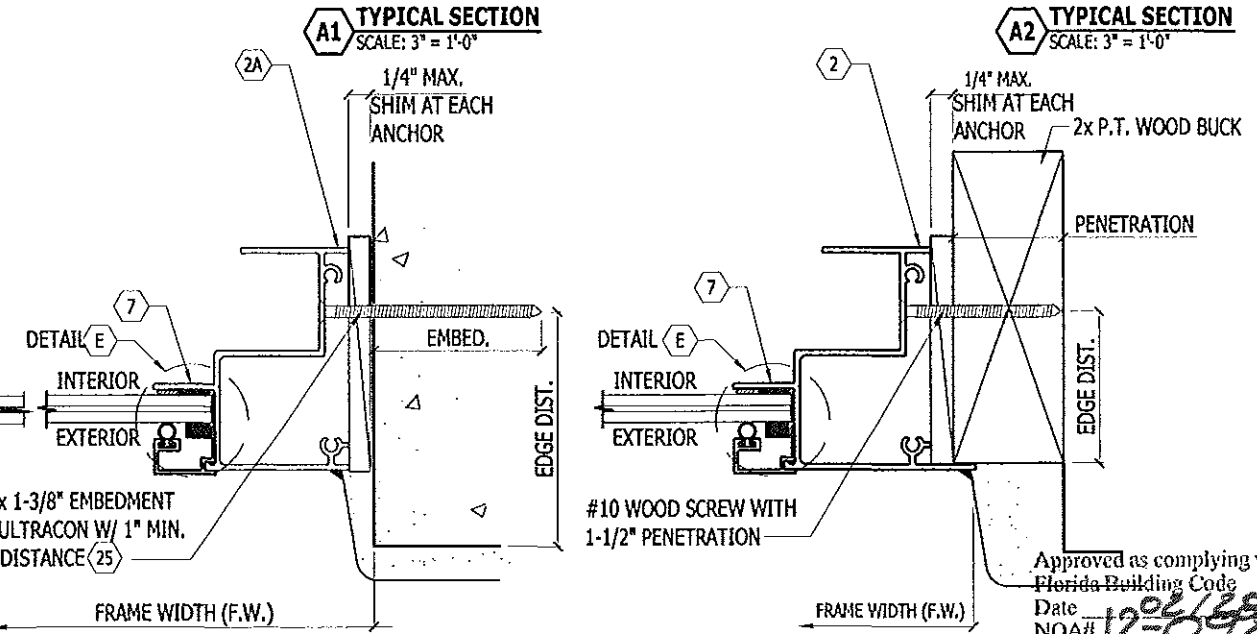
B JAMB TO 2x WOOD BUCK CONNECTION
SCALE: HALF SIZE



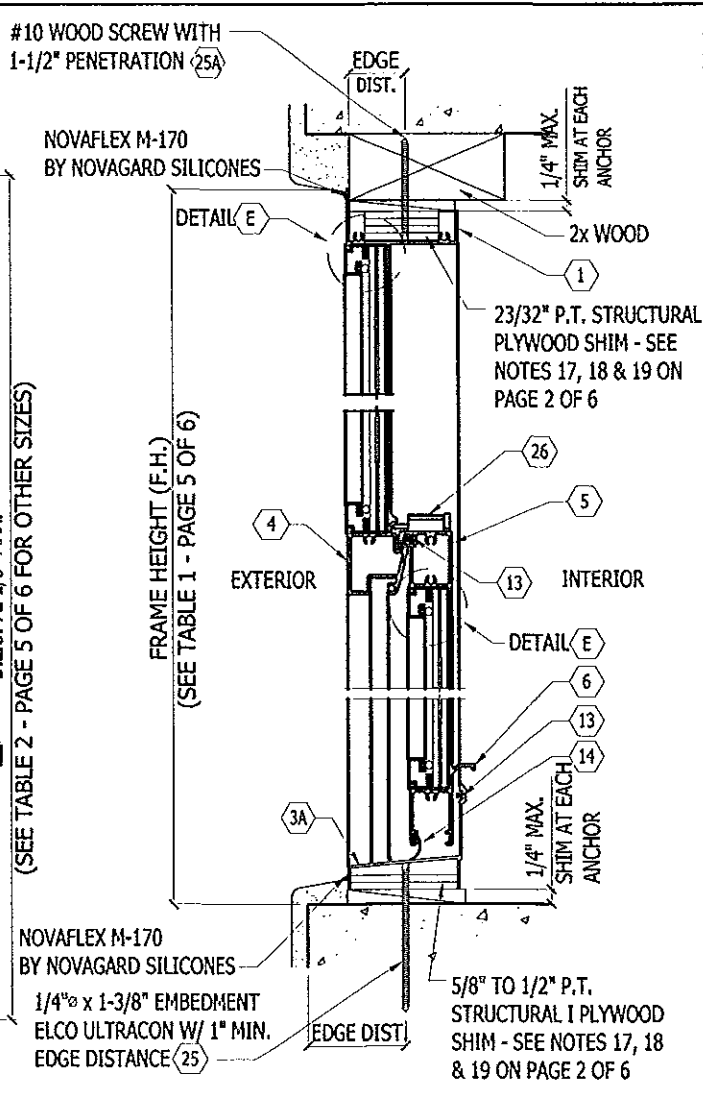
B1 MULLION CONNECTION TO JAMBS
SCALE: HALF SIZE



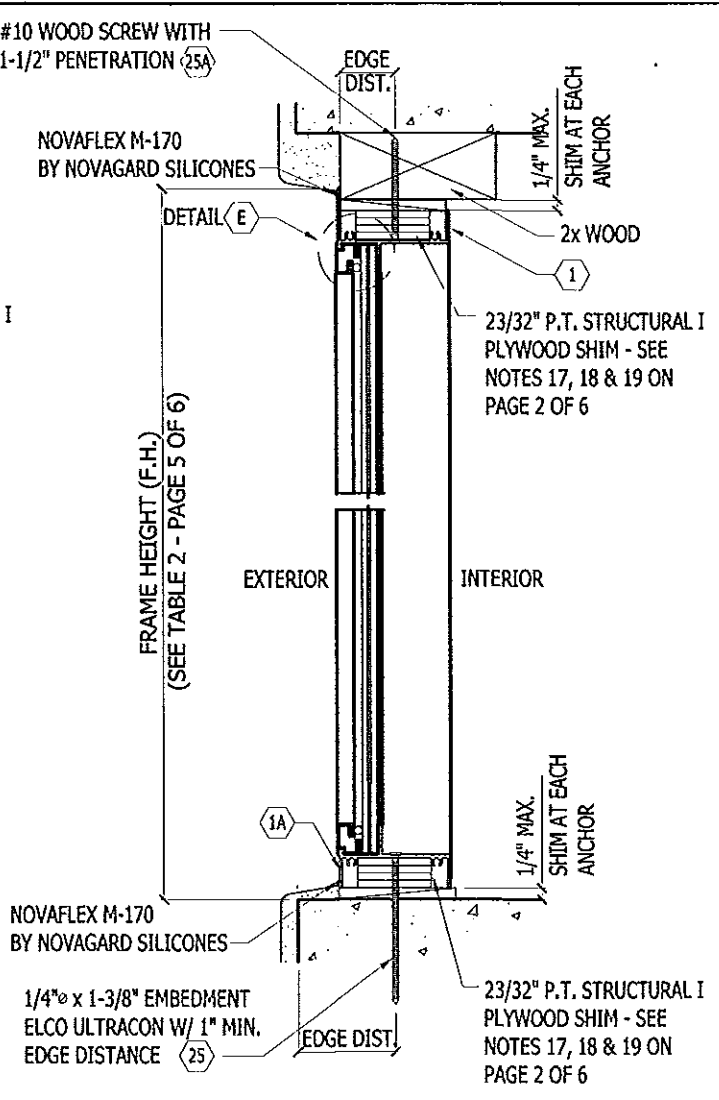
C JAMB TO CONCRETE CONNECTION
SCALE: HALF SIZE




C1 JAMB TO WOOD CONNECTION
SCALE: HALF SIZE



A1 TYPICAL SECTION
SCALE: 3\"/>



A2 TYPICAL SECTION
SCALE: 3\"/>



KNEZEVICH ASSOCIATES
Consulting Engineers • COA 27989
2590 S.W. 105th Terrace • Davie, Florida 33324
T (954) 821-6933 • V1@Knezevich-Associates.com
www.Knezevich-Associates.com

SH250 ALUMINUM SINGLE HUNG WINDOW IR WITH PICTURE WINDOW IR

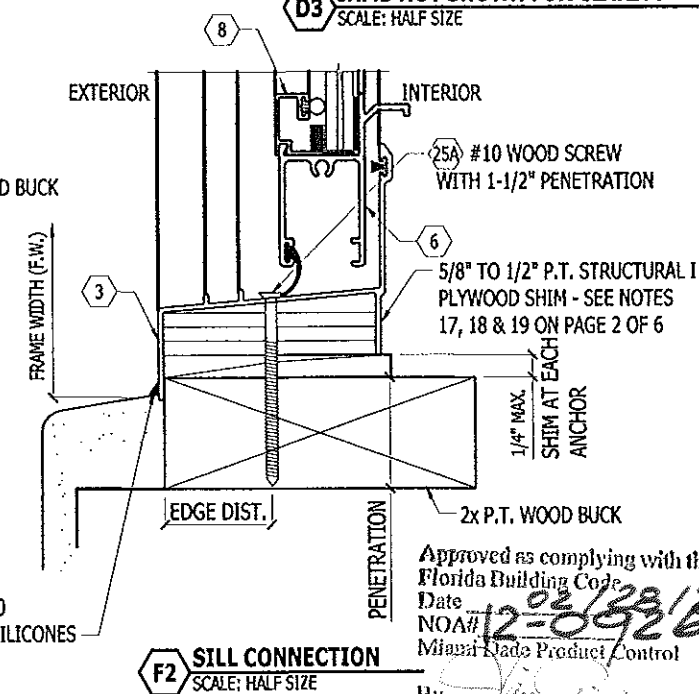
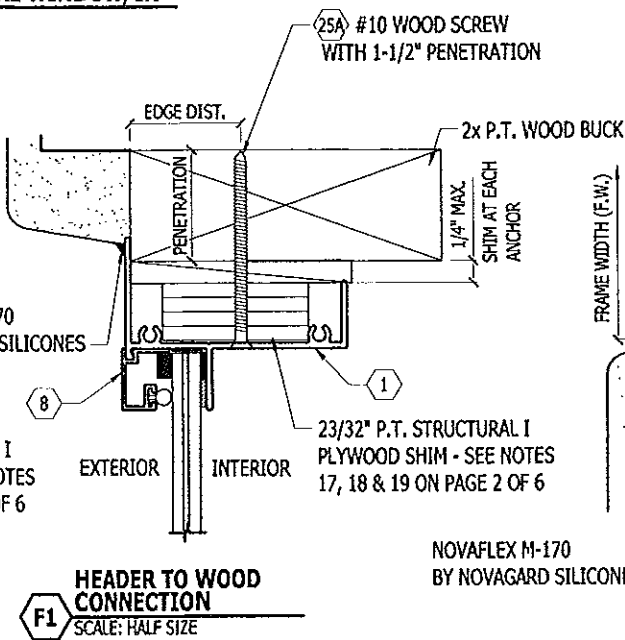
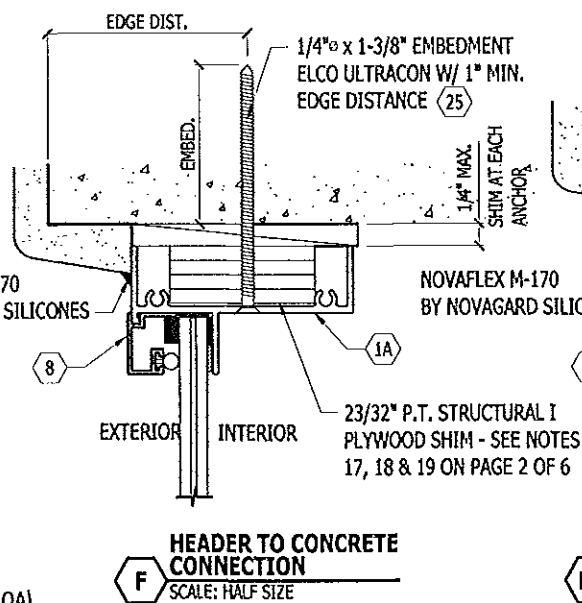
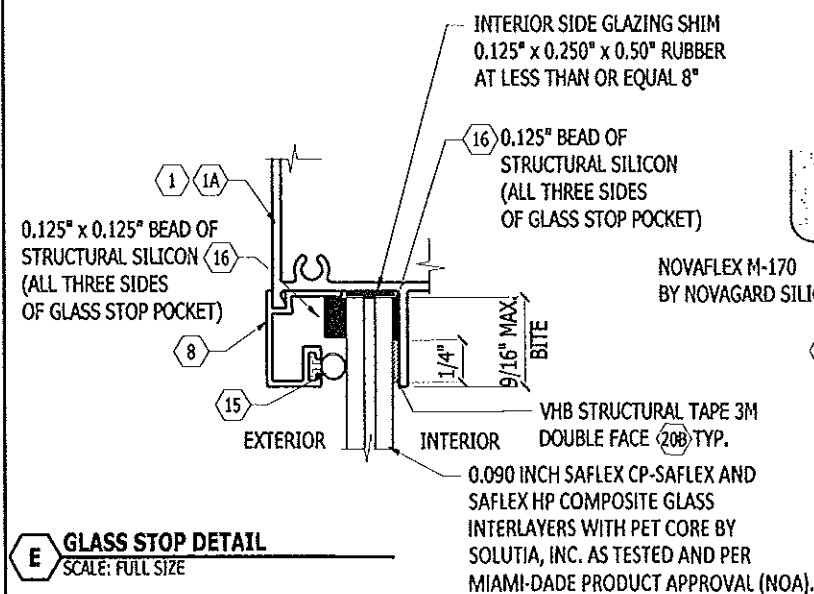
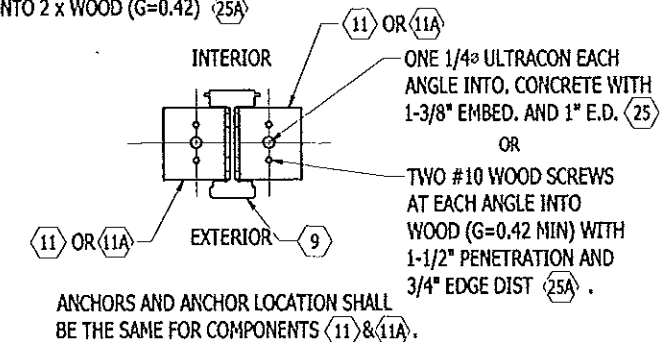
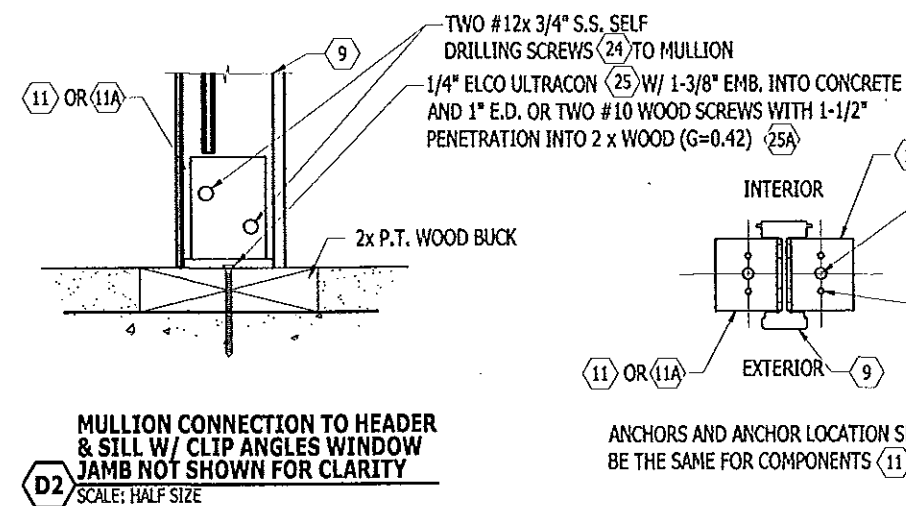
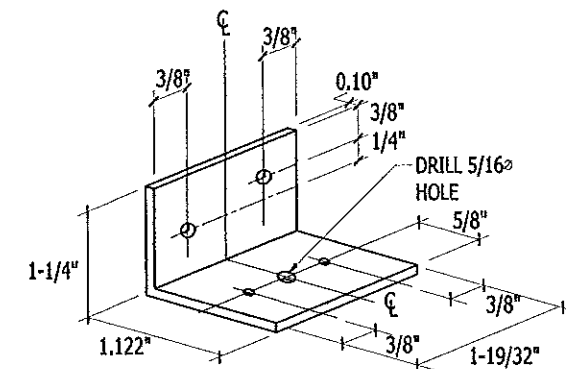
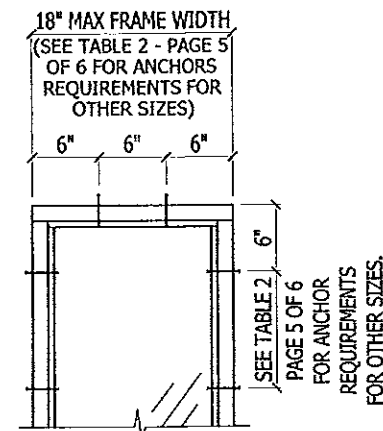
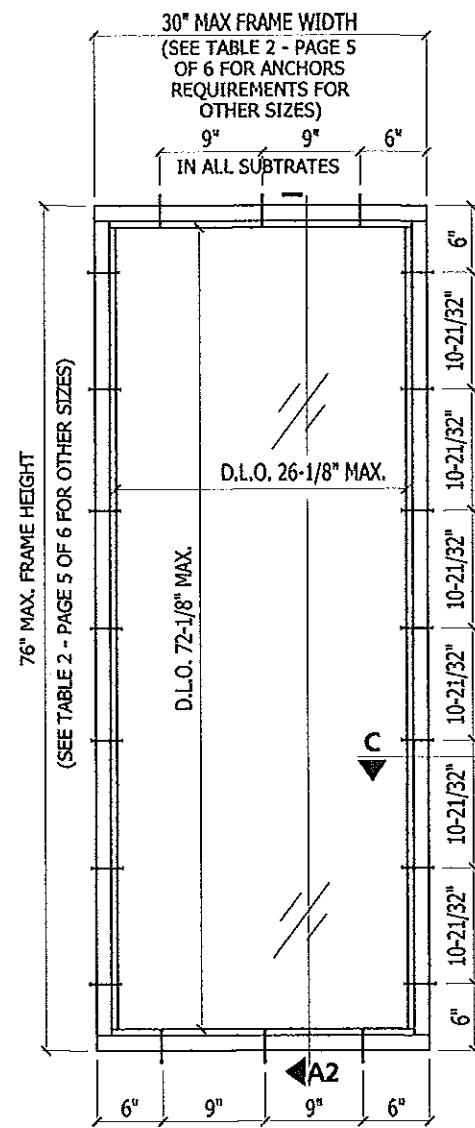
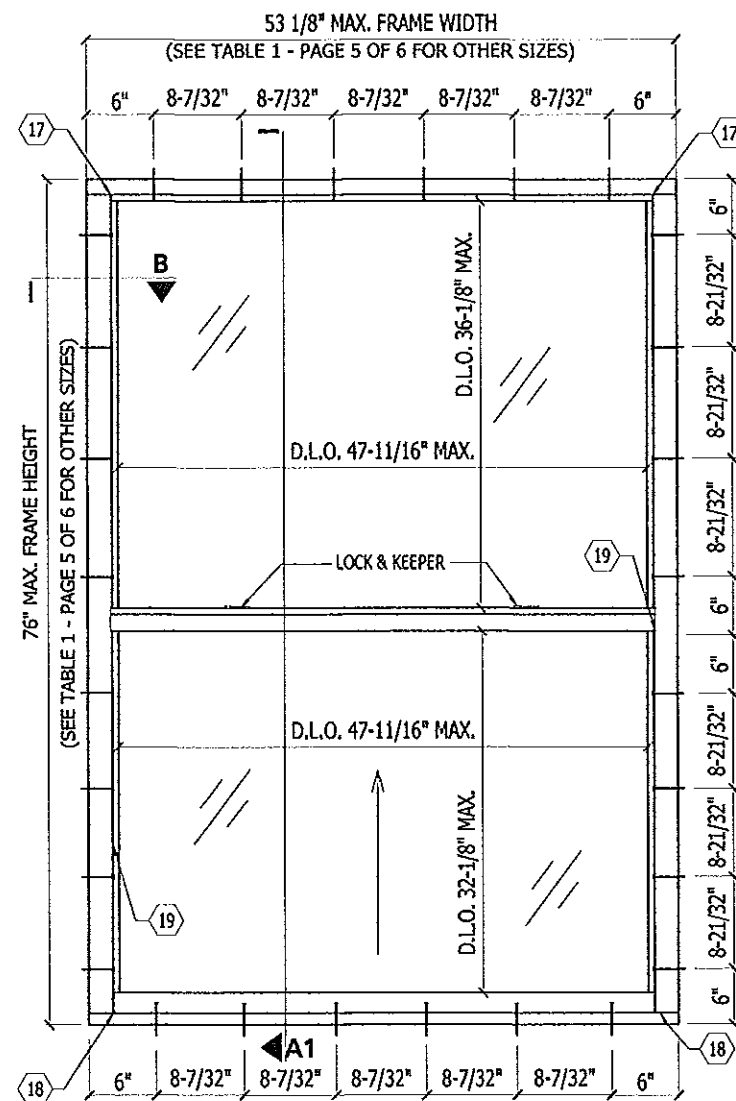
AIR MASTER AWNING, LLC.
WINDOWS AND DOORS
ROAD PR #2 INTERIOR KM 56.7
BARCELONETA, P.R. 00617
Tel: (787) 622-1800 Fax: (787) 622-0067

revisions		description
no	date	by

V.J. Knezevich
Professional Engineer
FL License No. PE 0010983

JUL 06 2012

drawn by: ARV scale: AS NOTED
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drawing no: **12-201**
sheet 3 of 6



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NOA# 12-0926
Miami Made Product Control
By [Signature]

TABLE 1 - SH250 WINDOW IR SIZE VS DESIGN LOADS & ANCHOR SCHEDULE								
WIDTH OF FULL WINDOW (in)	HEIGHT OF FULL WINDOW (in)	POSITIVE DESIGN LOAD (psf)	NEGATIVE DESIGN LOAD (psf)	#10 WOOD SCREW IN G = 0.42 WOOD OR BETTER SEE TABLE 1 NOTES 1 & 2 BELOW		1/4" ELCO ULTRACON IN CONCRETE OR GROUT SEE TABLE 1 NOTES 1 & 2 BELOW		1/4" ELCO ULTRACON IN CMU SEE TABLE 1 NOTES 1 & 2 BELOW
				JAMB Quantity	HEADER/SILL Quantity	JAMB Quantity	HEADER/SILL Quantity	FRAME JAMB TO WALL Quantity
19-1/8	26	73.7	73.7	4	2	4	2	4
26-1/2	26	73.7	73.7	4	3	4	3	4
37	26	73.7	73.7	4	5	4	5	4
53-1/8	26	73.7	73.7	4	6	4	6	4
19-1/8	38-3/8	73.7	73.7	4	2	4	2	4
26-1/2	38-3/8	73.7	73.7	4	3	4	3	4
37	38-3/8	73.7	73.7	4	5	4	5	4
53-1/8	38-3/8	73.7	73.7	4	6	4	6	6
19-1/8	50-5/8	73.7	73.7	6	2	6	2	6
26-1/2	50-5/8	73.7	73.7	6	3	6	3	6
37	50-5/8	73.7	73.7	6	5	6	5	6
53-1/8	50-5/8	73.7	73.7	6	6	6	6	6
19-1/8	56	73.7	73.7	6	2	6	2	6
26-1/2	56	73.7	73.7	6	3	6	3	6
37	56	73.7	73.7	6	5	6	5	6
53-1/8	56	73.7	73.7	6	6	6	6	8
19-1/8	63	73.7	73.7	8	2	8	2	6
26-1/2	63	73.7	73.7	8	3	8	3	6
37	63	73.7	73.7	8	5	8	5	6
53-1/8	63	73.7	73.7	8	6	8	6	8
19-1/8	76	73.7	73.7	8	2	8	2	8
26-1/2	76	73.7	73.7	8	3	8	3	8
37	76	73.7	73.7	8	5	8	5	8
53-1/8	76	73.7	73.7	8	6	8	6	10

TABLE 1 NOTES:

- THE ABOVE TABLE REPRESENTS THE TOTAL NUMBER OF ANCHORS REQUIRED AFTER CONSIDERING THE COMPARATIVE ANALYSIS THAT CHECKS TENSION AND SHEAR AS A COMBINED REACTION, THE ANCHOR BENDING CAUSED BY SHEAR FORCES AND THE MAXIMUM ANCHOR SPACING FROM TESTING.
- MUST START ANCHOR LOCATIONS WITH ONE ANCHOR, IN FRAME JAMB, 6" ABOVE AND BELOW MEETING RAIL AND ONE ANCHOR 6" FROM EACH CORNER WHERE FRAME HEADER/FRAME SILL MEET THE FRAME JAMB. BALANCE OF ANCHORS ARE TO BE EQUALLY SPACED.
- NO COMBINATION OF WIDTH AND HEIGHT MAY EXCEED THE SINGLE HUNG WINDOW FRAME AREA OF 28.04 SQUARE FEET (53-1/8" MAX. x 76" MAX.) OR THE LARGEST SASH D.L.O. AREA OF 11.96 SQUARE FEET (47-11/16" MAX. x 36-1/8" MAX.). BOTH ARE SHOWN ON DRAWING 12-201, PAGE 3, EXTERIOR ELEVATION SINGLE HUNG WINDOW WITH PICTURE WINDOW.

ANCHOR GENERAL NOTES:

- #10 WOOD SCREW INTO G-0.42 WOOD, 3/4" EDGE DISTANCE, WITH 1 1/2" PENETRATION, T=190, V=182.86#.
- 1/4" DIAMETER ELCO ULTRACON INTO 2846 PSI CONCRETE, 1" EDGE DISTANCE, MINIMUM SPACING = 4" WITH 1 3/4" EMBEDMENT, T=460#, V=225#.
- 1/4" DIAMETER ELCO ULTRACON INTO GROUT FILLED BLOCK, 2 1/2" EDGE DISTANCE, MINIMUM SPACING = 4 1/2" WITH 2 1/4" EMBEDMENT, T=410#, V=250#.
- 1/4" DIAMETER ELCO ULTRACON INTO 1,924 PSI CMU, 1" EDGE DISTANCE, MINIMUM SPACING = 6" WITH 1 1/4" EMBEDMENT, T=140#, V=140#.
- #10-24 THROUGH BOLT AND NUT (GALVANIZED) V=197#.
- FOR ATTACHMENT TO 6063-T5 OR STRONGER ALUMINUM ALLOY, WITH A MINIMUM THICKNESS OF 1/8", USE ELCO CONSTRUCTION PRODUCTS 1/4-20, BI-FLEX 300 S.S. BI-METAL (T=259#, V=715#) SELF DRILLING FASTENERS-HWH (DRILL POINT 3) WITH STALGARD COATING. FASTENER ENGAGEMENT WITH METAL MUST BE AT LEAST 3 PITCHES ON SCREW WITH MINIMUM OF 1/2" EDGE DISTANCE. THE ALUMINUM ALLOY FRAME MUST BE OF A STRENGTH, SIZE AND THICKNESS TO SUPPORT THE WINDOW SIMILAR TO THAT SHOWN IN THE DETAILS FOR WINDOWS WITH THE ULTRACON INSTALLATION. FASTENER QUANTITIES AND SPACING SHALL BE THE SAME AS SHOWN FOR THE #10 WOOD SCREW. LOAD CAPACITY OF ALUMINUM ALLOY FRAME, WITH WINDOW, MUST BE VERIFIED AS COMPLIANT WITH THE FLORIDA BUILDING CODE 2010, BY A REGISTERED PROFESSIONAL ENGINEER.
- FOR ATTACHMENT TO 12 GAUGE (MIN.) STEEL, USE ELCO CONSTRUCTION PRODUCTS 1/4-20, BI-FLEX 300 S.S. BI-METAL (T=360#, V=715#) SELF DRILLING FASTENERS-HWH (DRILL POINT 3), WITH STALGARD COATING. THE STEEL FRAME MUST BE OF A STRENGTH, SIZE AND THICKNESS TO SUPPORT THE WINDOW SIMILAR TO THAT SHOWN IN THE DETAILS FOR WINDOWS WITH THE ULTRACON INSTALLATION. FASTENER QUANTITIES AND SPACING SHALL BE THE SAME AS SHOWN FOR THE #10 WOOD SCREW. LOAD CAPACITY OF STEEL FRAME, WITH WINDOW, MUST BE VERIFIED AS COMPLIANT WITH THE FLORIDA BUILDING CODE 2010, BY A REGISTERED PROFESSIONAL ENGINEER. USE G-90 GALVANIZED STEEL OR SEE FBC 2010 DISSIMILAR METAL REQUIREMENTS.
- ALL ELCO ULTRACONS ARE TO BE COATED WITH STALGARD.
- ALL ELCO ULTRACONS AND LAG SCREWS ARE TO BE PHILLIPS, FLAT HEAD.

TABLE 2 - PICTURE WINDOW IR SIZE VS DESIGN LOADS & ANCHOR SCHEDULE								
WIDTH OF FULL WINDOW (in)	HEIGHT OF FULL WINDOW (in)	POSITIVE DESIGN LOAD (psf)	NEGATIVE DESIGN LOAD (psf)	#10 WOOD SCREW IN G = 0.42 WOOD OR BETTER SEE TABLE 2 NOTES 1 & 2 BELOW		1/4" ELCO ULTRACON IN CONCRETE OR GROUT SEE TABLE 2 NOTES 1 & 2 BELOW		1/4" ELCO ULTRACON IN CMU SEE TABLE 2 NOTES 1 & 2 BELOW
				JAMB Quantity	HEADER/SILL Quantity	JAMB Quantity	HEADER/SILL Quantity	FRAME JAMB TO WALL Quantity
12	26	73.7	73.7	3	2	3	2	3
18	26	73.7	73.7	3	2	3	2	3
24	26	73.7	73.7	3	3	3	3	3
30	26	73.7	73.7	3	3	3	3	3
12	38-3/8	73.7	73.7	4	2	4	2	4
18	38-3/8	73.7	73.7	4	2	4	2	4
24	38-3/8	73.7	73.7	4	3	4	3	4
30	38-3/8	73.7	73.7	4	3	4	3	4
12	50-5/8	73.7	73.7	5	2	5	2	5
18	50-5/8	73.7	73.7	5	2	5	2	5
24	50-5/8	73.7	73.7	5	3	5	3	5
30	50-5/8	73.7	73.7	5	3	5	3	5
12	56	73.7	73.7	6	2	6	2	6
18	56	73.7	73.7	6	2	6	2	6
24	56	73.7	73.7	6	3	6	3	6
30	56	73.7	73.7	6	3	6	3	6
12	63	73.7	73.7	6	2	6	2	6
18	63	73.7	73.7	6	2	6	2	6
24	63	73.7	73.7	6	3	6	3	6
30	63	73.7	73.7	6	3	6	3	6
12	76	73.7	73.7	7	2	7	2	7
18	76	73.7	73.7	7	2	7	2	7
24	76	73.7	73.7	7	3	7	3	7
30	76	73.7	73.7	7	3	7	3	7

TABLE 2 NOTES:

- THE ABOVE TABLE REPRESENTS THE TOTAL NUMBER OF ANCHORS REQUIRED AFTER CONSIDERING THE COMPARATIVE ANALYSIS THAT CHECKS TENSION AND SHEAR AS A COMBINED REACTION, THE ANCHOR BENDING CAUSED BY SHEAR FORCES AND MAXIMUM ANCHOR SPACING FROM TESTING.
- MUST HAVE ONE ANCHOR 6" FROM EACH CORNER WHERE FRAME HEADER/FRAME SILL MEETS FRAME JAMB. BALANCE OF ANCHORS ARE EQUALLY SPACED.
- NO COMBINATION OF WIDTH AND HEIGHT MAY EXCEED THE PICTURE WINDOW FRAME AREA OF 15.83 SQUARE FEET (30" MAX. x 76" MAX.) OR THE D.L.O. AREA OF 13.09 SQUARE FEET (26-1/8" MAX. x 72-1/8" MAX.) BOTH ARE SHOWN ON DRAWING 12-201, PAGE 3, EXTERIOR ELEVATION SINGLE HUNG WINDOW WITH PICTURE WINDOW.
- FOR 12" WIDE PICTURE WINDOW HEAD AND SILL ANCHORS SHALL BE 3" FROM EACH END W/ BALANCE OF ANCHORS EQUALLY SPACED.

TABLE 3 - MULLION CONNECTION TO SH250 IR & PICTURE WINDOW IR			
SH WIDTH OF FULL WINDOW (in)	SH JAMB HEIGHT OF FULL WINDOW (in)	WIDTH OF PICTURE WINDOW SIZE (in)	NUMBER OF #10-24 BOLTS REQUIRED W/ 1 BOLT 6" FROM TOP, 1 BOLT 6" FROM BOTTOM, 1 BOLT 6" ABOVE MTG RAIL & 1 BOLT 6" BELOW MTG RAIL. BALANCE EQUALLY SPACED.
19-1/8 - 53-1/8	26 - 38-3/8	12 - 30	6
19-1/8 - 53-1/8	50-5/8 - 76	12 - 30	8

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By



KNEZEVICH ASSOCIATES

Consulting Engineers • COA 27989
2590 S.W. 105th Terrace • Davie, Florida 33324
T (954) 821-6933 • V1@Knezevich-Associates.com
www.Knezevich-Associates.com

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SH250 ALUMINUM SINGLE HUNG WINDOW IR WITH PICTURE WINDOW IR

AIR MASTER AWNING, LLC.

WINDOWS AND DOORS

ROAD PR #2 INTERIOR RM 56.7

BARCELONETA, P.R. 00617

Tel. (787) 622-1800 Fax (787) 622-0087

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no	by	date	

V.J. Knezevich
Professional Engineer
R. License No. 0010583

[Signature]

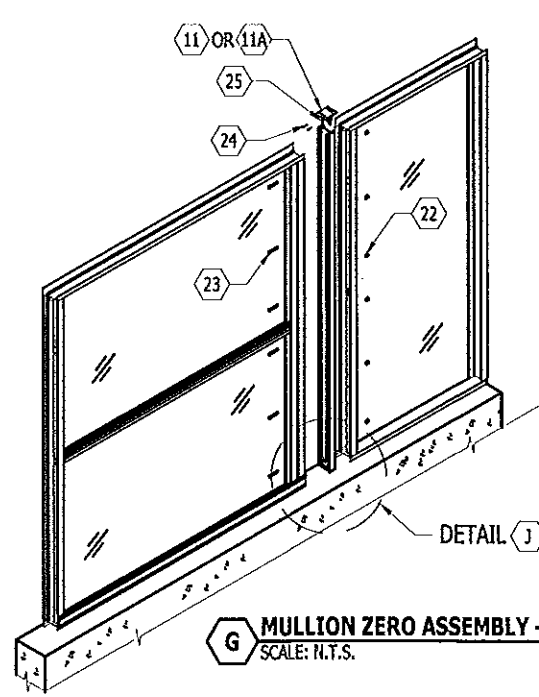
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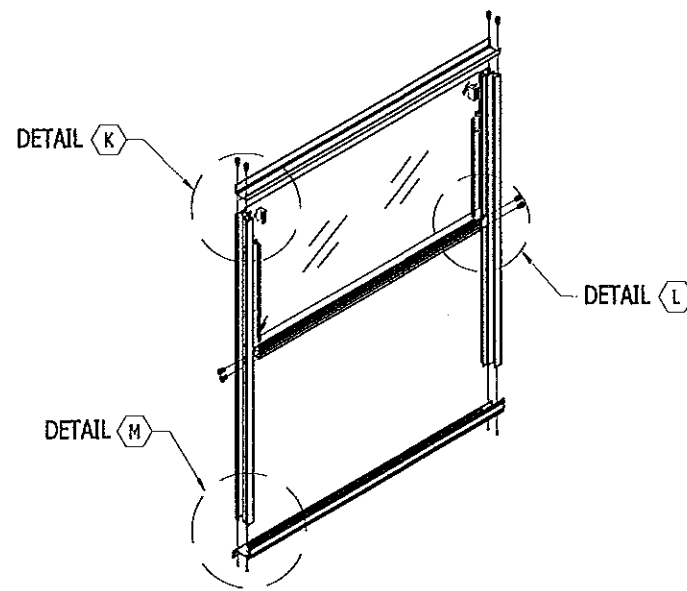
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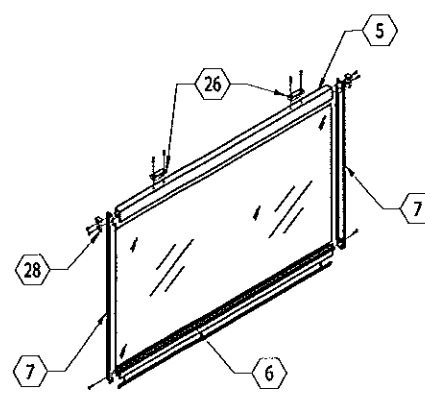
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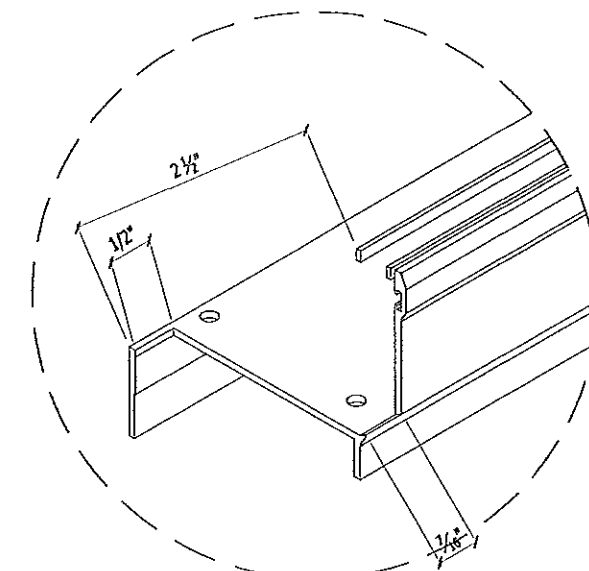
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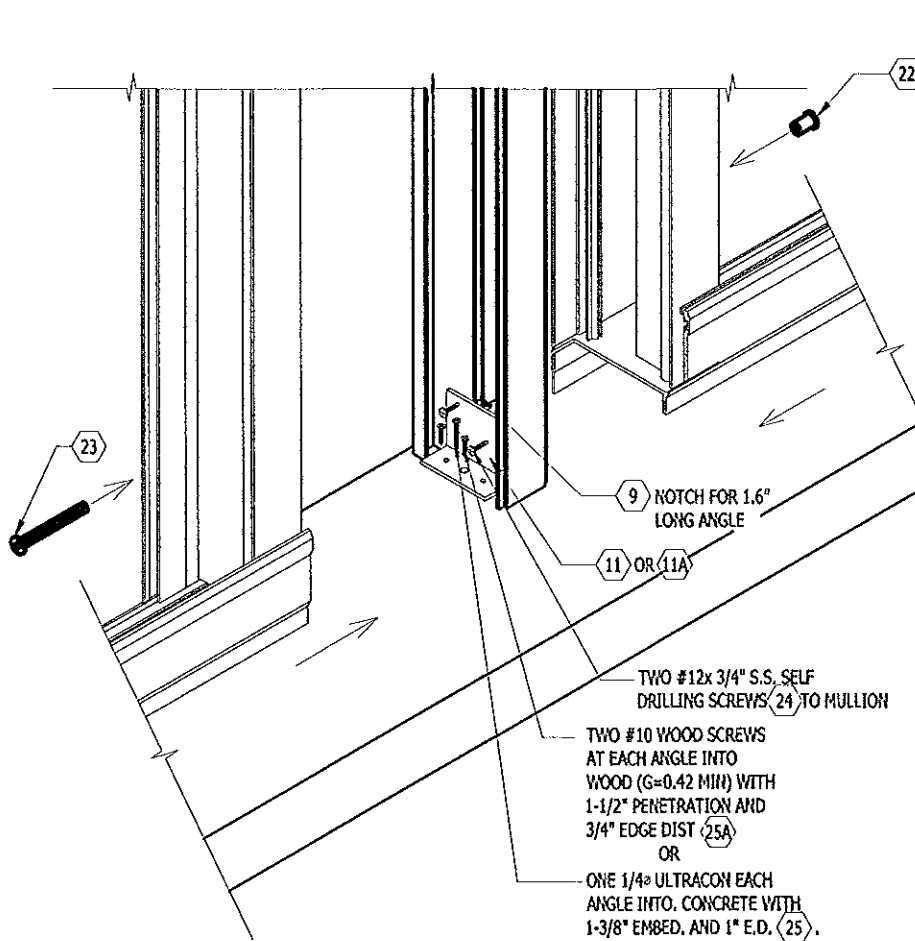


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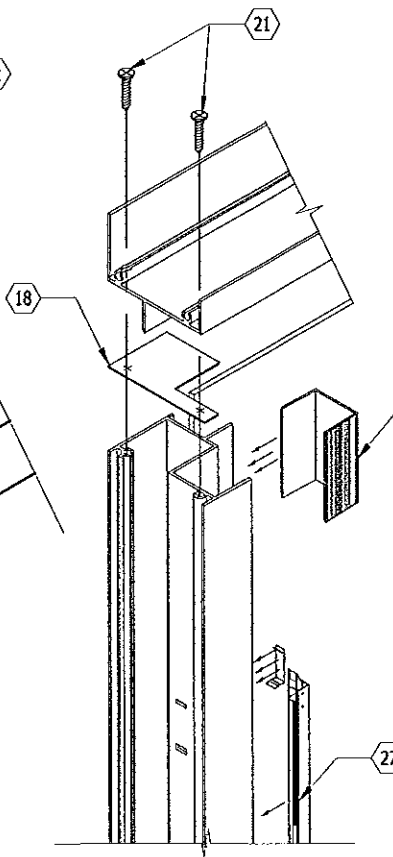


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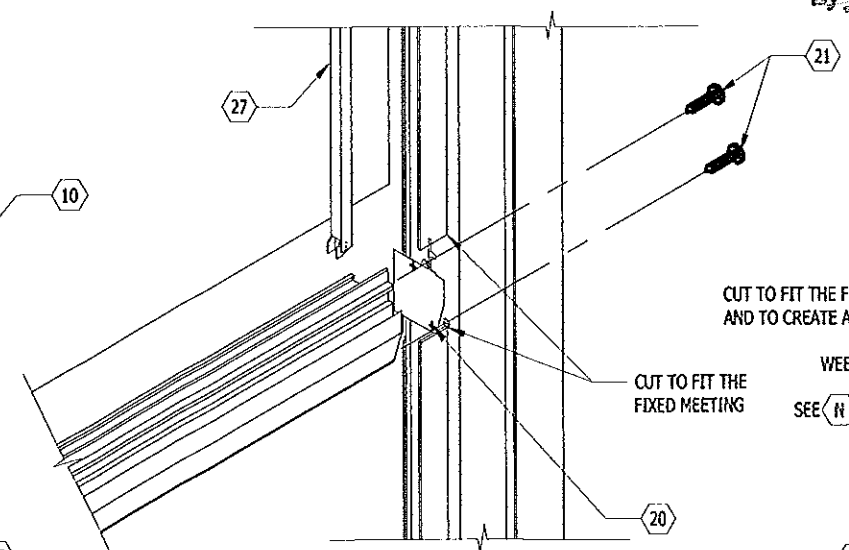
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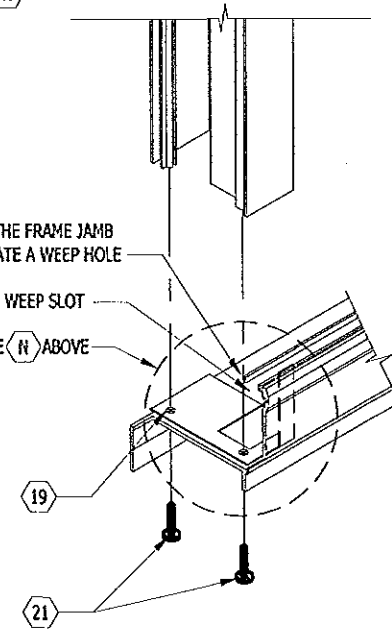
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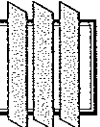
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KNEZEVICH ASSOCIATES
Consulting Engineers * COA 27989
2590 S.W. 105th Terrace * Davie, Florida 33324
T (954) 821-6933 * VJ@Knezevich-Associates.com
www.Knezevich-Associates.com
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SH250 ALUMINUM SINGLE HUNG WINDOW IR WITH PICTURE WINDOW IR

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WINDOWS AND DOORS
ROAD PR #2 INTERIOR KM 56.7
BARCELONETA, P.R. 00617
Tel. (787) 622-1800 Fax (787) 622-0087



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V.J. Knezevich
Professional Engineer
R. License No. 12010933

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sheet 6 of 6